

CLAIMS

We claim:

1. A method for manufacturing a device, the method comprising:
providing a first substrate and a second substrate;
forming a compliant element of a compliant first material on said first substrate, said compliant element comprising an end surface and a side surface adjacent said end surface;
coating at least a portion of said side surface with a layer of a second material;
pressing said second substrate against said end surface of said compliant element, said pressing including deforming said compliant element; and
bonding said substrates together.
2. The method of claim 1, wherein said first material comprises a polymer.
3. The method of claim 1, wherein said first material comprises a polyimide.
4. The method of claim 1, wherein said coating comprises selecting as said second material a material that provides said compliant element with a greater electrical conductivity than said first material alone.

5. The method of claim 1, wherein said coating comprises selecting as said second material a material that provides said compliant element with a greater hermeticity than said first material alone.

6. The method of claim 1, wherein said coating is performed after said pressing.

7. The method of claim 1, wherein said coating is performed prior to said pressing.

8. The method of claim 1, wherein said second material is less compliant than said first material.

9. The method of claim 1, wherein said bonding comprises bonding said second substrate to said compliant element.

10. The method of claim 1, further comprising forming a non-compliant spacer on one of said substrates, wherein said pressing comprises pressing said first and second substrates closer together until one of said substrates contacts said spacer.

11. A method for manufacturing a device, the method comprising:
 - providing a first substrate and a second substrate;
 - forming a compliant element on said first substrate;
 - pressing said first substrate and said second substrate together, said pressing including deforming said compliant element;
 - bonding said substrates together; and
 - coating at least a portion of said compliant element with a material that increases the hermeticity thereof.
12. The method of claim 11, wherein said compliant element comprises a polymer.
13. The method of claim 11, wherein said compliant element comprises a polyimide.
14. The method of claim 11, wherein said coating is performed after said pressing.
15. The method of claim 11, wherein said coating is performed prior to said pressing.
16. The method of claim 11, wherein said bonding comprises bonding said second substrate to said compliant element.

17. A device, comprising:
 - a first substrate;
 - a second substrate; and
 - a compliant element of a first, compliant material between said first substrate and said second substrate, said compliant element comprising a side surface coated at least in part with a layer of a second material, said compliant element exhibiting deformation consistent with said first substrate and a second side having been pressed together.
18. The device of claim 17, wherein said first material comprises a polymer.
19. The device of claim 17, wherein said first material comprises a polyimide.
20. The device of claim 17, wherein said layer of said second material provides said compliant element with greater electrical conductivity than said first material alone.
21. The device of claim 17, wherein said layer of said second material provides said compliant element with a greater hermeticity than said first material alone.
22. The device of claim 17, further comprising a non-compliant spacer pressed between said first and second substrates.

23. A device, comprising:

a first substrate;

a second substrate; and

a compliant element between said first substrate and said second substrate,
said compliant gasket coated with a hermeticity-increasing layer and exhibiting
deformation consistent with said first substrate and said second substrate having been
pressed together.

24. The device of claim 23, wherein said compliant gasket comprises
polyimide.